

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

I. STATUS OF THE CLAIMS

Claims 1, 3, 4-8, 10 and 11 are amended herein.

In view of the above, it is respectfully submitted that claims 1-12 are currently pending and under consideration in the present application.

II. DRAWING OBJECTION

In item 4, on page 2 of the Office Action, the Examiner indicates that the drawings are objected to because reference number 45 in FIG. 4B is not mentioned in the specification. However, reference number 45 is mentioned at lines 34-35, on page 9 of the specification.

In view of the above, it is respectfully requested that the objection be withdrawn.

III. OBJECTION TO THE SPECIFICATION

In item 5, on page 3 of the Office Action, the Examiner indicates that the claim for foreign priority in the specification should be placed in the first sentence of the specification following the title. The specification is amended herein so that the claim for foreign priority is placed in the first sentence following the title.

Also, in item 6, the Examiner indicated that the disclosure is "objected to" because the term REGISTRATER on page 9, lines 23 and 36 does not appear in the corresponding drawing. The specification is amended herein to replace the term "REGISTRATER" with the correct term "REGISTER" so that it corresponds with the FIG. 4A.

In view of the above, it is respectfully submitted that the objections are overcome.

IV. REJECTION OF CLAIMS 3 AND 10 UNDER 35 U.S.C. §112, SECOND PARAGRAPH

In item 7, on page 3 of the Office Action, claims 3 and 10 are rejected under 35 U.S.C. 112, second paragraph. Claims 3 and 10 are amended herein to overcome the rejection.

In view of the above, it is respectfully submitted that the rejection is overcome.

V. REJECTION OF CLAIMS 1, 2, 4-9 AND 11 UNDER 35 U.S.C. §102(B) AS BEING ANTICIPATED BY USP# 5,764,770 TO SCHIPPER ET AL. AND USP# 4,405,829 TO RIVEST ET AL.

The present invention as recited in claim 1 (as amended herein), relates to an apparatus for authenticating a digital signature. Moreover, the apparatus comprises a signature synthesizing part creating image information by synthesizing the digital signature and a predetermined mark, which enables a receiver to visually recognize a mark of the signer."

Schipper discloses an apparatus for producing a self-authenticating visual image of a selected view, using a digital camera together with a position determination system that provides position information. The Examiner asserts that Schipper discloses where position information and the specification (a digest) is encrypted using the RSA process of Rivest for authentication purposes.

It is noted here that an apparatus for producing a self-authenticating visual image as described by Schipper is not the same as an apparatus for authenticating a digital signature as disclosed in the present invention. Therefore, Schipper does not disclose the features recited in claim 1 of the present invention.

Rivest discloses a public key system for establishing private communications and for providing private communications with a signature. A characteristic of this system is that the public revelation of the encryption key does not reveal the corresponding decryption key. As a result, couriers or other secure means are not required to transmit keys, since a message can be enciphered using an encryption key publicly revealed by the intended recipient. Only the intended recipient can decipher the message since only he knows the corresponding decryption key. Furthermore, the message can be "signed" by deciphering it with the privately held decryption key. Anyone can verify the signature using the corresponding publicly revealed encryption key corresponding to the originator. Signatures cannot be forged and the signer cannot later deny the validity of his signature. See column 6, lines 21-37 of Rivest.

However, Rivest also does not disclose the features recited in claim 1 of the present invention. According to the present invention, a digital signature is built in the image information and then the image information including the digital signature is embedded in the digital document. Thus, a receiver receiving a document can visually recognize that a mark represented by the image information and embedded in the document is sent from the signer of the document (see claim 1). Support the features described above may be found at line 35 of page 3 to line 7 of page 4, and lines 25-29 of page 16 of the Applicant's specification.

In light of the above, it is submitted that Schipper and Rivest are both silent regarding the features recited in claim 1.

Similar to claim 1, claim 4 of the present invention describes a signature extracting part that extracts a digital signature from image information that is embedded into a digital document. The image information is capable of showing a predetermined mark, which enables a receiver to visually recognize a mark of a signer of the digital signature (see claim 4). It is submitted that Schipper and Rivest also do not teach the features recited in claim 4.

Similar to claim 1, claims 6 and 8 recite, "creating image information by synthesizing the digital signature and a predetermined mark, which enables a receiver to visually recognize a mark of the signer."

Similar to claim 4, claims 7 and 11 recite, "extracting the digital signature from image information embedded into a digital document, said image information showing a predetermined mark, which enables a receiver to visually recognize a mark of a signer of the digital signature."

Therefore, Schipper and Rivest also do not disclose the features recited in claims 6-8 and 11.

Claims 2, 5 and 9 depend from claims 1, 4 and 8. Thus, for at least the reasons that claims 1, 4 and 8 distinguish over the cited prior art, it is respectfully submitted that claims 2, 5 and 9 also distinguish over the cited prior art.

In view of the above, it is respectfully submitted that the rejection is overcome.

VI. REJECTION OF CLAIMS 3, 10 AND 12 UNDER 35 U.S.C. §103(A) AS BEING UNPATENTABLE OVER USP# 5,764,770 TO SCHIPPER ET AL. AND USP# 4,405,829 TO RIVEST ET AL. AND FURTHER IN VIEW OF USP# 5,668,897 TO STOLFO

The comments in section V above, also apply here because claims 3, 10 and 12 depend from claims 1, 8 and 11. Thus, for at least the reasons that claims 1, 8 and 11 distinguish over the cited prior art, it is respectfully submitted that claims 3, 10 and 12 also distinguish over the cited prior art.

In view of the above, it is respectfully submitted that the rejection is overcome.

VII. CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of

allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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